DOCUMENT RESUME

ED 055 046 SP 005 280

AUTHOR McClellan, Billie Frances
TITLE Student Involvement in the Instructional Process Through Tutoring.
INSTITUTION Florida Education Association, Tallahassee.
SPONS AGENCY Florida State Dept. of Education, Tallahassee. Div of Elementary and Secondary Education.
PUB DATE Jun 71
NOTE 40p.

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Academic Achievement; *Cross Age Teaching; *Individual Instruction; Literature Reviews; *Low Achievers; Manuals; *Tutoring

ABSTRACT

This review of the literature on student tutoring considers four questions: 1) are there patterns of cross-age, cross-culture, or cross-ability which increase or decrease the tutoring effectiveness? 2) does a highly-structured, controlled program mean better results than informal tutoring? 3) is the level of learning actually raised for both tutor and tutee? and 4) are there types of subject-matter areas which more readily lend themselves to the tutoring process? A list of positive results experienced by tutors and tutees was synthesized from studies reviewed, and the requirements for evaluating the programs were also considered. Outlines for tutorial manuals were developed and are included in the document for organizers, tutorial managers, and tutors. Included are the following appendixes: 1) specifications for individualized instruction, 2) the essential elements of the structured tutoring model, 3) principal reasons why many low achieving students do not succeed in school, 4) principal reasons why the unique learning characteristics of low achieving students cannot be dealt with successfully in the regular classroom setting, and 5) basic components of a tutorial system. There is an annotated bibliography of 71 items. (MBM)

ED055046

STUDENT INVOLVEMENT IN THE INSTRUCTIONAL PROCESS THROUGH TUTORING

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

by

Billie Frances McClellan, Ed.D.

Compiled by

FLORIDA EDUCATION ASSOCIATION

for

State of Florida

DEPARTMENT OF EDUCATION

Tallahassee, Florida

Floyd T. Christian, Commissioner

June, 1971

SP005280

This report was supported by the Division of Elementary and Secondary Education, Shelley S. Boone, Director. It was produced according to specifications prepared under the Florida Educational Research and Development Program.

STUDENT INVOLVEMENT IN THE INSTRUCTIONAL PROCESS THROUGH TUTORING

INTRODUCTION

The literature of the last several years reports the growing interest of schools and projects in carrying out programs in which students tutor students. This is one mushrooming activity coming out of the general concensus that students benefit from being involved in the instructional process. The variety found in the variables of these programs is touched upon in Thelen's statement:

> The purpose seems to be to help the tutor, the tutee, or both. Compared to the tutee, the tutor may or may not be older, brighter, or more maladjusted; of a different socioeconomic class; or attend the same school.[1]

Different view points are found underlying the structure of these programs. The important part of these programs is the "me-to-you" thrust of the teaching.

Dr. Herbert Thelen of the University of Chicago observes that rarely does anything of an innovation remain after the innovator leaves, but he expresses optimism that student tutoring may be a focal point for change. He expresses his belief that student tutoring depends on:

> . . . an entirely new kind of interaction among students under conditions such that revealing feedback can be obtained by the teacher. It calls for teachers to cooperate across grade lines in an enterprise to the advantage of both. It invites recognition of all sorts of individual characteristics of pupils that are usually ignored; and it makes creative thinking about lesson plans and activities the norm

---

[1]Herbert A. Thelen, "Tutoring by Students," The School Review, LXXVII (September - December, 1969), 229.

> rather than the exception. It is also likely to interest and involve the parent group, thus creating a reference group or "imaginal audience" whose expectations will help maintain action.[1]

Dr. Thelen comments further concerning the tutoring program and observes:

> Today's new element is the anticipation of benefits to the tutor. It is hoped that he will develop his own academic skills or understanding further, as he employs them to teach another; that he will form a better character (e.g., attitudes), become better adjusted or more adequate as a person, discover new interests or commitments for his life.[2]

Educators are recognizing the growing need for providing individualized instruction (Appendix A). A promising resource for the individualization of instruction and for changing the learning climate of the classroom lies in the children themselves. Success has come from the use of elementary school pupils to assist each other in learning. High school boys and girls, particularly those with academic problems of their own, have shown a willingness and eagerness to do something worthwhile, something which they can do and has merit. The one-to-one relationship between the older student and the younger pupil provides each an experience which contributes to personal growth. For the older student, he gains first-hand knowledge of what it means to help another person with a problem. He acquires some insight into the role of the teacher and this knowledge, if nothing else, should make the educational process more meaningful for him. For the younger child, the program permits the individual instruction which educators recommend but seldom have been able to arrange. Besides the academic gains, the children are engaged in a relationship which may be unique in their lives.

---

[1] Thelen, "Tutoring by Students," p. 239.

[2] Ibid., p. 229.

The structure of the classroom climate in which these students assist one another is one aspect of the tutoring situation now receiving attention. Some educators who are exploring the dynamics of the helping relationship structures which can be fostered in the classroom are doing so because they believe that education is living, not just preparation for life, and the experiences in our classrooms should reflect this belief.[1]

CONCERNS OF THE STATE DEPARTMENT

The State Department of Education posed four questions for consideration as the literature was reviewed. The questions and the studies related to the questions follow.

1. Are there patterns of cross-age, cross-culture, or cross-ability which increase or decrease the tutoring effectiveness?

The studies reviewed by this researcher included programs designed to utilize cross-age, cross-culture, or cross-ability. No study reported their pattern of matching tutor to tutee producing negative results. A seven-year study in operation in California which is seeking to build a tutorial community includes in its planning: intragrade student tutoring, intergrade student tutoring, student self-tutoring, teacher tutoring, and tutoring by parents and other volunteers.[2] Cloward reports there is a growing belief that important contributions to the educational development

---

[1]Herbert A. Thelen, Learning by Teaching, Report of the Helping Relationship Conference, University of Chicago, December, 1969 (Chicago: University of Chicago, 1969), p. 2.

[2]Ralph J. Melaragno and Gerald Newmark, "A Tutorial Community Works Toward Specified Objectives in an Elementary School," Educational Horizons, XLVIII (Winter, 1969), 35.

of culturally disadvantaged children can be made by other young people whose life experiences provide a basis for empathy with the population being served.[1] Another study, sponsored by two evaluation centers at UCLA, concluded:

> Often when a tutoring program is initiated, teachers assume that only the most capable students should be used as tutors. However, this study has demonstrated that the achievement level of the tutor seems to make little difference in the amount of learning attained by the tutee, whereas there are significant differences in the gains made by the tutors. Thus the findings of this investigation support the recommendation that low-achieving students make effective tutors of younger disadvantaged children, and at the same time, profit considerably themselves.[2]

Ronald and Peggy Lippitt from the University of Michigan are two members of a team of social scientists who have carried out research testing ways of developing a program which would stimulate older students and at the same time train them to help meet the needs of younger students. The "Cross-Age Helping Program" evolved from this work. They conclude that the cross-age approach "is effective in causing constructive behavioral growth and preventing the development of behavioral problems."[3]

2. Does a highly-structured controlled program mean better results than informal tutoring?

Recent literature speaks clearly and forcefully to this point. Niedermeyer studied the effects of training on the instructional behavior of student tutors and concluded:

---

[1]Robert D. Cloward, "Studies in Tutoring," The Journal of Experimental Education, XXXVI (Fall, 1967), 14 quoting Henry Salzman, "The Poor and the Schools," in New Careers for the Poor: the Non-Professional in Human Service, ed. by Arthur Pearl and Frank Riessman (New York: Free Press, 1965), pp. 39-54.

[2]Stanley Frager and Carolyn Stern, "Learning by Teaching, " The Reading Teacher, XXIII (February, 1970), 417.

[3]Ronald Lippitt and Peggy Lippitt, "Cross-Age Helpers," National Education Association Journal, LVII (March, 1968), 24-6.

> . . . that the instructional behaviors of trained and untrained tutors are quite different. The instructional behaviors implied by the objectives of a training program should be based on established psychological principles. If it is desired that tutors behave according to these principles then they should be trained.[1]

Grant Von Harrison, while working with Systems Development Corporation, developed materials for training students to tutor. He observed:

> . . . that those tutors who had been trained with the package demonstrated greater mastery of the skills than those who previously had been trained to use the skills on a piecemeal basis while they were working with a learner. Tutors who were trained with the package demonstrated more confidence than those who had been trained a little at a time.[2]

The structured tutoring model (Appendix B) was an outgrowth of his earlier findings.[3] An effective system of structured tutoring must include two components: (1) Tutors must be trained in very specific skills and not left to their own devices, (2) Careful assessment prior to instruction, during instruction, and following instruction with adequate reporting of student progress must be an integral part of the system.

A field test of programmed and directed tutoring was carried out in the Indianapolis Public Schools. The authors reporting this research state not all tutoring programs are equally effective. They conclude the kind and amount of tutoring and the characteristics of the children tutored are critical factors.[4] This study considered two type of tutoring:

---

[1]Fred C. Niedermeyer, "Effects of Training on the Instructional Behaviors of Student Tutors," The Journal of Educational Research, LXIV (November, 1970), 122.

[2]Grant Von Harrison, Training Students to Tutor, (Santa Monica, California: Systems Development Corporation, 1967), p. 7.

[3]Grant Von Harrison, Structured Tutoring (Provo, Utah: Division of Communication Services, Brigham Young University, 1971).

[4]D. G. Ellson, Phillip Harris, and Larry Barker, "A Field Test of Programmed and Directed Tutoring," The Reading Research Quarterly, III (Spring, 1968), 341.

(1) Programmed tutoring, a technique derived from learning principles and programmed instruction in which details of the tutors' activities were tightly controlled by a prescribed sequence of materials and procedural rules which were highly responsive to the individual child's (reading) performance, and (2) Directed tutoring, derived from current teaching theory and practice which was less structured; activities and progress were determined to a greater degree by the tutor's judgment.[1] While children at all levels of ability benefited, the improvement in achievement was markedly greater for children who have the greatest difficulty in learning to read in the classroom.[2] The analysis showed that the type of tutoring had a significant effect on all measures of reading achievement, with differences favoring programmed tutoring in every case. Number of tutoring sessions had no significant effects on achievement scores.[3]

3. Is the level of learning actually raised for both tutor and tutee?

The amount of empirical research supporting conclusions of studies and the sophistication of the design of the studies found in the literature varied but conclusions were harmonious in stating that the tutor and the tutee gained from the program. The Oneida Consolidated School District of New York involved high school tutors in the learning experiences of elementary school students. The authors concluded "the most obvious and immediate impact of the program has been on the high school tutors. Participation in the venture seemingly has reinforced qualities of self-reliance

---

[1] Ibid., p. 307.

[2] Ibid., p. 341.

[3] Ibid., p. 331.

and self-confidence."[1] Speaking of the elementary pupils they felt the changes were two-fold:

> First of all, the classroom teachers stated that the pupils being tutored showed considerable improvement in their academic performance, particularly in rote-type operations, e.g., multiplication, division. Secondly, the pupils involved had more positive attitudes towards school and their studies.[2]

The learning problems of disadvantaged children in American classrooms (Appendices C and D) has been the content focus of volumes of today's literature. Tutoring as a means of assisting in meeting the needs of the disadvantaged student is creating much excitement for many educators. The program HELP designed for disadvantaged children of Jersey City, New Jersey involved disadvantaged high school tutors as elementary reading teachers. Reported conclusions are:

> The high school students profit as much from the program as do the needy grade school children. The high school students learned that they have something significant to contribute, that they measured up to the task, and that they were needed. There is no substitute for being needed, and for a genuine feeling of achievement.
>
> The grade school children gained considerably from the program. Exactly what and precisely how much was difficult to determine. It was clear the children had marked attitudinal changes toward reading. The children began to look for things to read; some became enthusiastic about telling others what they had read. The regular school teachers said they noticed a marked difference in the attention of the children in the regular classes after the HELP program started.[3]

The Homework Helper Program developed by Mobilization for Youth, the Lower East Side antipoverty agency of New York was the focus of an article in the New York Times:

---

[1]Stanley E. Bell, Norene L. Garlock, and Sam L. Colella, "Students as Tutors," The Clearinghouse, XLIV (December, 1969), 244.

[2]Ibid., pp. 243, 244.

[3]Timothy P. Rossi, "HELP: Students Teach Students," Reading Improvement, VI (Fall, 1969), 48.

> . . . A study of the program released last year by Columbia University School of Social Work found that the tutors from slum areas not only helped their pupils but also made great improvements in reading themselves. The tutees showed a 6.2 month gain in their reading levels after five months. A control group that had no tutoring showed the usual slum school rate, a 3.5 month gain in the same period. The tutors improved even more than their pupils. In a seven-month period their mean gain in reading level over their control group was a year and seven months.[1]

Some studies place under-achievers in the teaching role and report both the learner and the tutor make significant progress.[2] Mention has also been made in this summary that the children having the greatest difficulty in the classroom setting were the ones showing the greatest improvement in achievement (Ellson, Harris, and Barker). Further observations by these authors noted "that scores for tutored children were shifted upward across the board, the positive effects were much greater for children with the poorest achievement.[3]

4. Are there types of subject-matter areas which more readily lend themselves to the tutoring process?

This researcher spent weeks locating and reviewing every available work in the literature written about the student tutoring experience. This review leads to the conclusion successful tutoring is not dependent upon the type of subject matter areas so much as it is upon certain conditions being met in the tutorial program and in the tutoring experience. Robertson's study of the effects of intergrade tutoring experiences on tutor self-concept reported high probability that positive attitudinal effects will

---

[1]Thelen, "Tutoring by Students," p. 231 quoting New York Times, October 29, 1967.

[2]Cloward, "Studies in Tutoring," p. 24 and Frager and Stern, "Learning by Teaching," p. 403.

[3]Ellson, Harris, Barker, "A Field Test of Programmed and Directed Tutoring," p. 333.

be realized for both the tutor and the learner regardless of the context or complexity of the subject matter or learning tasks.[1] In a short but very complete paper providing information by which a project can plan and operate a successful training program, Hazel-Ann Isgar states:

> For a program to be effectively planned and executed, the goals need to be clearly defined and articulate. Therefore, before any steps are taken to plan a tutor training program, a decision about the goals and purposes of the program should be reached. The objectives for each training series will vary depending upon the type of tutoring program. . . . Each program has its unique structure and goals. If these are not clear to tutors from the beginning, problems will arise when the staff is attempting to accomplish one thing and tutors something different.[2]

A study interested in the disadvantaged child was carried out in a public school in the Bedford-Stuyvesant section of Brooklyn, New York. Although this study was investigating the problem of motivation in school learning, it is relevant to this question. The authors stated:

> . . . , certain circumstances must be met if the tutoring is to be effective. The basic requirement is a clear understanding of precisely what a child knows and what he does not know. . . .
>
> Analysis of the pupil's skills requires parallel analysis of the subject matter being taught. . . .
>
> . . . . . .
>
> . . . the subject matter must be viewed as a sequence of planned tasks instead of solely as a body of materials to be covered.

---

[1]Douglas J. Robertson, The Effects of an Intergrade Tutoring Experience on Tutor Self-Concept, Paper presented at the 49th Annual Conference of the California Educational Research Association, San Diego, April 30, 1971.

[2]Hazel-Ann Isgar, Tutor Training (Washington, D.C.: Tutorial Assistance Center, 1966), p. 3.

[3]Lillian Zach, Vivian Horner, and Judith Kaufman, "Tutoring in a Slum School," The Elementary School Journal, LXX (October, 1969), 25.

[4]Ibid., p. 27.

VALUES OF THE TUTORIAL PROGRAM

One of the previous questions spoke to the issue of the tutorial program's ability to raise the learning level of the tutor and tutee. The various materials found by the researcher indicated many advantages gained by the tutor and tutee which are of a nature other than the academic achievement. The following list of positive results experienced by tutors and tutees is the outcome of synthesizing the many studies reviewed in preparation for writing this summary.

1. Tutors experienced the development of their own sense of adequacy. Self-respect and self-esteem became realities for many individuals who previously saw themselves as non-contributing members of their class or group.

2. Tutors have found a meaningful use of subject matter. Shame no longer accompanies the study of "skills" several years below the tutor's grade level. Their need for mastery of subject matter so they can help their tutee causes the tutor to assimilate subject matter better and to seek to learn more of it.

3. Giving the tutor the opportunity to take an adult role and receive the status of teacher or helper leads him to experience what it is like to be a part of a meaningful and productive society.

4. Tutors develop insights into the teaching-learning process and can cooperate more effectively with their own teachers.

5. The amount of teaching taking place in a classroom is increased as tutors give attention to individual needs within the classroom.

6. Individualized instruction, as mentioned earlier, is the result of the tutor giving his full attention to the tutee and responding to him without worrying about anything else going on around them.

7. The tutor provides the companionship and individual attention needed by many younger children who otherwise feel insecure and alone.

8. Tutors have been known to "reach" children teachers had not been able to reach. The tutee is closer in age to the tutee, he speaks the tutee's language. The performance of the tutor is a more realistic goal for the tutee than the skills and standards of the teacher.

EVALUATION

Evaluation plays a vital role in the value of the existing tutorial program to the needs of the students in the program, successful revision of an existing program, and contribution of an existing program to the improvement of education for the students of the American schools. The one objective of evaluation is to ascertain whether desired goals were actually achieved by the utilization of means already proven effective.[1] Evaluative instruments are:

1. Informal observations
2. Interviews
3. Questionnaires and surveys guided by common sense interpretations of objectives
4. Change in grade point average (report cards)
5. Inventory sheets requiring the checking off of objective behavior patterns
6. Rating scales and objective check lists
7. Sociometric devices
8. Personal documents such as autobiographies and diary records
9. Use of cummulative records to evaluate several areas of development
10. Pre- and post-testing in subject areas, personal adjustment areas and attitude and interest areas
11. Case studies

Numbers one through three are instruments that simply require the observer, interviewer, and questioner to look in a systematic way for common sense evidence of the objectives sought. Numbers four through eleven are instruments that will probably require some form of trained assistance, at least in the initial stages of evaluation if not throughout the entire evaluation process.[2]

---

[1]James S. Noce, Research and Evaluation in Tutorial Programs (Washington, D.C.: Tutorial Assistance Center, 1967), p. 5.

[2]Ibid., p. 7.

Because of his belief that few people understand the meaning of the terms "research" and "evaluation" or the methods by which these processes can be accomplished, James Noce prepared the booklet already quoted. He further recommends:

> . . . , that the decision as to which instrument or set of instruments best suits a particular project's evaluation needs be made in conjunction with trained assistance. It is also strongly recommended that even after the decision has been made to use a less sophiscated measure that trained assistance be retained at least for the initial stages of evaluation. This is in no way an over cautious recommendation but one based on several sound considerations. First, any measuring instrument, no matter how simple, must be well constructed, reliable, and valid before it becomes operational. For example, when using questionnaires and surveys it is most important that they be easily read and understood and that they actually tap the kind of information sought in an unbiased and consistent manner. To do this may very well require trained and experienced evaluators working on the initial formulation and standardization of the measuring instrument.[1]

Researchers who are working with the data that is generated from the California school in which a tutorial community is being established have distinguished between the evaluation of students and the evaluation of instruction. Their requirements for evaluating instruction are important in the considerations of establishing a tutorial system.

> Evaluating instruction requires the preparation of statements of objectives in behavioral terms, the development of criterion instruments and procedures that provide precise, quantitative measures of performance on each important objective, and the preparation of a detailed description of the instructional system to which test results can be related. Evaluating instruction leads to improvement of instruction by providing an empirical basis for making needed modifications.[2]

---

[1] Ibid., pp. 7, 8.

[2] Melaragno and Newmark, "A Tutorial Community Works Toward Specified Objectives in an Elementary School," p. 37.

TUTOR TRAINING

Evidence from the studies reviewed strongly confirms the need for adequate training of the tutors prior to service and during the tutoring process to be a top priority item. Authors of some of the studies already cited in this summary mentioned facets of the tutor training section of their programs. The following have been selected as sources of information that would be of significance in the planning of tutorial programs. Cloward describes the two aspects of the focus of the preservice training given four afternoons a week for two weeks by Mobilization for Youth:

> . . . (1) attention was given to the goals of the tutorial program, the organization of the program, and the duties of a tutor, and (2) characteristics of the youngsters they would encounter, the scholastic levels at which these pupils would be operating, and the kinds of activity in which tutors might engage their pupils during the first few meetings.[1]

Melaragno and Newmark's explorations have shown the importance of four aspects of tutoring that will be emphasized. They are:

> . . . (1) careful diagnosis of each learner's needs, (2) provision for a rich variety of instructional materials appropriate for meeting learning needs, (3) training of tutors in their roles, (4) evaluation of tutorial effectiveness in terms of cognitive and affective growth of both learners and tutors.[2]

Frager and Stern report that the UCLA Study which concerned itself with two forms of counseling tutors taught certain basic principles of learning to the tutors during counseling sessions. Examples of these are:

> . . . (1) the tutor was to look for observable evidence that the child tutored could, after instruction, do something which he had been unable to do before, (2) the tutor was to use a task analysis

---

[1]Cloward, "Studies in Tutoring," pp. 14, 15.

[2]Melaragno and Newmark, "A Tutorial Community Works Toward Specified Objectives in an Elementary School," p. 35.

approach to determine which of the component skills the child already possessed before introducing new material, (3) the tutors were taught the value of extrinsic and intrinsic rewards as motivation to promote learning, (4) tutors were presented the idea that punishment, while it may suppress behavior, is not an effective way to produce new learning, and (5) tutors were impressed with the need for providing the learner with immediate feedback to inform the child whether his response was correct or incorrect.[1]

SUGGESTED CONTENT FOR TUTORIAL MANUALS

A tutorial program will need manuals for the tutors, the tutorial manager and the organizer of the program. A part of the responsibility of the organizer of the program is the training of the tutorial manager. As organizers train tutorial managers who will then train tutors, it becomes essential for the manuals to repeat content. The second time an item is listed in the outline of a manual in this summary the detailed description of that item will be omitted and the reader will be referred to the first mention of that item.

The following outlines for manuals are developed from the review of the literature.

---

[1]Frager and Stern, "Learning by Teaching," pp. 404, 405.

I. ORGANIZER'S MANUAL

A. Behavioral objectives identified for the system - if an objective includes a hierarchical sequence of skills for its accomplishment then enabling objectives will be identified

B. Management procedures for a tutorial program

1. Selecting student tutors
2. Scheduling tutoring sessions - Student Assignment Sheet
The student assignment sheet will provide spaces for the following entries: (1) Name of tutor, (2) Name of the student the tutor is assigned to work with, (3) Name of the student's teacher, (4) Number of the student's home room, and (5) Instructional prescription that has been made for the student.
3. Tutor Evaluation - Tutor Evaluation Sheet
Accurate records should be kept on the progress which tutors make as they interact with the system. Tutor evaluation sheets will assist the TUTORIAL MANAGER in determining the effectiveness of given tutors, to identify weaknesses and problems when they arise, and to provide directions in assisting in overcoming weaknesses which tutors may evidence.
4. Student progress records - Student Profile Sheet
Tutor Log

When students are working towards the accomplishment of specific objectives, there must be a very specific and accurate record kept of their progress. This record must be available to the students to enable them to see the progress they are making. The Profile Sheets will be capable of depicting the following information: (1) The date each pretest is administered to individual students, (2) Student's performance on each pretest, (3) Instructional prescriptions made and the date of the prescription for individual students, (4) The date mastery of each objective is achieved by individual students, and (5) The date each posttest was administered and student's performance on each posttest.

The Tutor Log will provide a means of making the following entries: (1) Date of each tutoring session, (2) Tutoring activity for each session, and (3) Any learning gains achieved in each session.

5. Procedures for preparing individualized instructional prescriptions

C. Description of the correct procedure for administering tests - these tests will measure the behaviors specified in the objectives

1. A diagnostic pretest - this test is prepared from the objectives stated for the system. This test will identify those skills which the student has not yet acquired. Based on his performance on the pretest he will be directed to specific learning activities rather than be required to take all learning activities. In this way, focus is on the specific weaknesses that the student may have and he can be directed to instructional materials specifically designed to overcome these weaknesses.

2. Criterion referenced posttest - these tests are tied directly to the objectives identified for use in the tutorial system. These tests determine how well the student performed in relation to the objectives rather than in relation to other students. A criterion level will be specified and some minimal acceptable performance identified so that when the student has passed a criterion referenced test at a given level we will know the kinds of skills which he has acquired as a result of the instruction.

D. Materials designed to help the TUTORIAL MANAGER train tutors Complete instructions for tutors in the use of these tutoring materials must be in this manual. A complete understanding of these materials and their use must be accomplished in the training of TUTORIAL MANAGERS.

1. Tutoring home study materials - these are the materials which the students who will serve as tutors may take home with them and study prior to coming to a tutor training session. These will include both reading and programmed materials. It has been found in the past that this type of self-study material makes the tutor-training sessions much more effective than when students come to these sessions completely unprepared.

2. Tutor role-playing guides - these materials are designed specifically to help a tutor practice the skills in a training session which he will use when he is serving as a tutor. These guides will assist the tutors in acquiring both the one-to-one interaction skills (sitting down one-to-one with a student to help him acquire specific skills) and the small group discussion skills which will be required by the instructional materials (materials given to both the student and the tutor during a structured discussion session on specific topics). General tutorial skills which must become automatic for the tutor can be studied through this same manner.

3. Tutor training session guides - are materials designed to structure the tutor training sessions to review with the tutors the materials acquired in home study and to give directions for the use of tutor role-playing materials.

4. Instructional materials designed to train the tutor in general tutorial skills

   a. Correct use of positive reinforcement
   b. The ability to put a student in a tutoring situation at ease
   c. Ability to avoid over prompting of the student

5. Instructional materials designed to train the tutor in specific tutorial skills
   These skills will be dictated by the content to be studied and the tasks identified by analysis as necessary for mastery to be achieved.

II. TUTORIAL MANAGER'S MANUAL

It has been found with previous studies that unless TUTORIAL MANAGERS are carefully trained it is difficult to train and manage tutors. Training materials must be prepared to instruct the TUTORIAL MANAGERS in effective procedures for training tutors and in managing the tutorial system.

A. Management procedures for a tutorial program

1. Selecting student tutors
2. Scheduling tutoring sessions - Student Assignment Sheet
3. Tutor evaluation - Tutor Evaluation Sheet
4. Student progress records - Student Profile Sheet
   Tutor Log
5. Procedures for preparing individualized instructional prescriptions

B. Instructional materials TUTORIAL MANAGERS must be skilled in using

1. Scope and sequence chart of the behavioral objectives
2. Descriptions of the correct procedure for administering the tests designed for this tutorial system - these tests will measure the behaviors specified in the objectives

   a. Diagnostic pretest
   b. Criterion referenced posttest

C. Tutor training materials - including complete instructions for tutors in the correct use of the following tutor-training materials

1. Tutoring home study materials
2. Tutor role-playing guides
3. Tutor training session guides
4. Instructional materials designed to train the tutor in general tutorial skills

   a. Correct use of positive reinforcement
   b. The ability to put a student in a tutoring situation at ease
   c. Ability to avoid over prompting of the student

5. Instructional materials designed to train the tutor in specific tutorial skills

III. TUTOR'S MANUAL

A successful tutoring system must include tests and instructional materials which are used by the tutors to teach learners. Tutors must be trained in both general and specific tutoring skills. Management procedures related to the tutor's responsibilities must be carefully explained and incorporated into the tutor's behaviors.

A. Outline of the tutor training sessions

B. Instructions for the use of the tutor home study materials

C. Instructions for the use of the tutor role-playing guides

D. Instruction in the use and value of the following management procedures

1. Scheduling tutoring sessions - Student Assignment Sheet
2. Tutor evaluation - Tutor Evaluation Sheet
3. Student progress records - Student Profile Sheet
   Tutor Log

E. General tutoring skills

1. Correct use of positive reinforcement
2. Ability to put a student in a tutoring situation at ease
3. Ability to avoid over prompting of the student

F. Specific tutoring skills

G. Behavioral objectives - sccpe and sequence chart

H. Description of the correct procedures for administering the tests and interpreting the test results

1. Diagnostic pretest
2. Criterion referenced posttest

APPENDIX A

Specifications for Individualized Instruction

1. Pre-established instructional objectives

2. Valid diagnostic tests

3. Instruction that is prescribed based on performance on diagnostic tests

4. Management procedures capable of assuring that individual students receive the instruction they need efficiently

5. Management procedures capable of systematically checking for mastery of both enabling and criterion objectives and modifying instructional prescription as necessary

6. Management procedures capable of systematically monitoring the student's behavior while they receive the instruction (e.g., Does the student attend to the stimulus? What is the student's error rate? Is the student consistently receiving confirmation for correct responses? Is the student responding before receiving feedback? Is the student progressing at a rate commensurate with his abilities?)

7. Management procedures capable of providing individual students clarification and direction immediately

8. Valid criterion tests

APPENDIX B

The Essential Elements of the Structured Tutoring Model

1. Pre-established instructional objectives which are not being effectively reached by some students using existing instructional practices

2. Instructional sequence of objectives specified

3. Valid means of assessing a given student's mastery of the pre-established instructional objectives

4. Instructional materials commensurate with the instructional objectives and designed to promote the behavior found weak or missing from the student's repertoire by the pretest

5. Validated tutoring techniques and procedures that (1) apply to any goals and any materials, and (2) are based in the specific goals of the program and the instructional materials being used

6. Management procedures capable of making instructional prescriptions for the individual student based on pretest performance

7. Management procedures capable of assuring that individual students receive instructional prescriptions sequentially

8. Management procedures capable of systematically checking individual students' mastery of instructional prescriptions through validated criterion tests prepared in advance of instruction

9. Management procedures which provide for modification of instructional procedures when mastery of an instructional prescription is not achieved by individual students

APPENDIX C

Principal Reasons Why Many Low Achieving Students Do Not Succeed in School

1. Low motivation
2. Lack of adequate individualized help at home
3. Their ability to work independently is limited
4. They require more clarification and explanation regarding procedures and directions
5. They are extremely reluctant to request individual help or clarification
6. They are unsure of themselves because of repeated failure
7. They are prone to respond impulsively
8. They learn how to get the teacher to provide them answers by means of subtle clues, which results in them not learning the desired concept, task, etc.
9. They require more appropriate practice with a new task than an advantaged student
10. Learning is not approached in small increments and systematically

APPENDIX D

Principal Reasons Why the Unique Learning Characteristics of Low Achieving Students Cannot be Dealt with Successfully in the Regular Classroom Setting

1. Because of time restraints the learning needs of low achieving students are not identified precisely enough

2. In a regular classroom setting it is extremely difficult to provide individual students additional clarification and explanation regarding procedures

3. It is humanly impossible for a teacher to monitor the behavior of students individually during a learning activity

4. In a regular classroom setting it is extremely difficult for a teacher to provide individual students additional appropriate practice on a new task

5. A teacher of necessity gears her instruction to the majority

6. There is a limit on how much specific feedback a teacher can provide individual students

7. There is a limit on how much reinforcement and encouragement a teacher can give individual students

APPENDIX E

Basic Components of a Tutorial System

1. Specifications on how to administer pretests and posttests, select student tutors, and maintain necessary records

2. Pretests (These must be capable of providing a valid measure of the child's ability to deal with the specified instructional objectives)

3. The following record sheets: Individual Profile Sheet, Tutor Assignment Sheet, and the Tutor Log

4. Tutor Training Materials (This includes the home study materials for tutors, any charts used, and the trainer's dialogue)

5. Instructional materials (This includes the flashcards, practice sheets, or books the tutors use when they work with a learner)

6. Posttests (These should be criterion referenced, prepared in advance of instruction, and must be valid measures of mastery of the objectives)

7. Scope and sequence chart of instructional objectives

8. An adult supervisor conversant with all the specified management procedures, pre- and posttesting procedures, tutoring techniques and procedures, and all aspects of record keeping

ANNOTATED BIBLIOGRAPHY

Bell, Stanley E.; Garlock, Norene L.; and Colella, Sam I. "Students As Tutors." The Clearinghouse, XLIV (December, 19[illegible]), 242-4.

A program directed at providing individualized instruction and in creating opportunities for more direct student involvement was initiated in the Oneida Consolidated School District. High school students, under faculty supervision, tutor elementary school children having difficulty mastering subject matter.

Borer, Leonard J. The UCLA Tutorial Project. Washington, D.C.: Tutorial Assistance Center.

Deals with the human relations aspect of tutorial projects. Discusses a major change in emphasis for the UCLA Tutorial Project and how this change resulted from an increased awareness and sensitivity to human motives and needs, as much with the student volunteers as with the pupils and parents in the communities where the program operates.

Brager, George. Influencing Institutional Change Through A Demonstration Project. Washington, D.C.: Tutorial Assistance Center, 1964.

The central concern is specifically with the problems encountered by Mobilization for Youth in attempting to change the New York City public schools. It deals with the forces in a changing situation; those necessary to success as a change agent and those that inhibit change. A must for any project staff seriously considering themselves to be agents of change.

Braverman, Miriam. Favorite Books of Disadvantaged Youth. Washington, D.C.: Tutorial Assistance Center.

A list of titles recommended by more than one library as books in which disadvantaged teenagers become involved. Prepared by the Committee on Reading List for Disadvantaged Youth, American Library Association.

Chesler, Mark. Tutorials: A Strategy for Educational Reform. Washington, D.C.: Tutorial Assistance Center.

Describes the problems of educating disadvantaged children in the standard school system. Discusses the role of the tutor and the type person needed to fill that role. Deals with the tutorial, its components, its goals. Particularly relevant for tutorial project staff. Allows insight into the tutorial project and orientation and training of tutors.

Clark, Kenneth B. Clash of Cultures in the Classroom. Washington, D.C.: Tutorial Assistance Center.

An indictment of the American Public School System and prevailing educational theories as depriving lower-class children of adequate education. Analysis of faulty assumptions among public educators: the "IQ trap," the self-fulfilling prophecies which perpetuate present handicaps, and a prescription to take the class war out of the classroom.

Cloward, Robert D. "Studies in Tutoring." The Journal of Experimental Education, XXXVI (Fall, 1967), 14-25.

This report concerns the evaluation of a program that featured the employment of high school students in a slum area as tutors for low achieving public elementary school pupils. The central issue in the evaluation is whether students who have not completed high school can serve effectively as tutors. The report deals with the effects of the tutorial service on the pupils and on their high school tutors as well.

Davis, Allison. Teaching the Culturally Disadvantaged Pupil. Washington, D.C.: Tutorial Assistance Center.

An explanation of cultural differences between economic classes and possibilities of changing the cultures of lower groups to be more like those of the higher. Dr. Davis uses statistics based on studies in three cities to support her thesis that the schools do and should play an important role in the "acculturation" of lower socioeconomic class children. The value lies in the description of cultural characteristics of classes.

Dickson, Pam. Orientation - Goals and Techniques. Washington, D.C.: Tutorial Assistance Center.

A discussion of the reasons and needs for a well-planned orientation for tutors. Various program alternatives are presented ranging from mass meetings with speakers and films to small informal discussion groups of prospective tutors and an experienced group leader or master tutor. The basic ingredients of orientation are outlined; sources of films and materials are listed.

Ellson, D. G.; Harris, Phillip; and Barker, Larry. "A Field Test of Programmed and Directed Tutoring." The Reading Research Quarterly, III (Spring, 1968), 307-367.

This study follows earlier studies in which programed tutoring was developed from a miniature laboratory-type procedure to a full-scale technique for individualized teaching. In this study the tutoring technique known as "programed tutoring" is compared with "directed tutoring." Programed tutoring is a carefully planned instructional procedure. Directed tutoring is a more traditional form of individual instruction.

Foster, George. The Dynamics of Change: Culture, Society, Psychology, and Economics. Washington, D.C.: Tutorial Assistance Center.

A short paper on the forces that bear in changing situations; it points out elements which, while not instrumental, are decisive. Useful for initial training, or during a shift in program emphasis from educational assistance to educational change.

Frager, Stanley, and Stern, Carolyn. "Learning by Teaching." Reading Teacher, XXIII (February, 1970), 403-5+.

Because so little attention has been paid to discovering ways in which tutorial programs might be improved, a study evaluating two completely different procedures for counseling tutors of younger children was sponsored by UCLA Center for the Study of Evaluation of Instructional Programs and the UCLA Head Start Evaluation and Research Center. The major focus of the study was to discover which type of tutor-instruction would produce the most significant growth in tutors as well as tutees. The first method followed traditional instructional procedures. The second method was a procedure consisting of five steps based on principles of learning: defining goals, defining obstacles, specifying alternatives, identifying consequences of alternatives, and making selections among alternatives.

Goldfarb, Jean, and Riessman, Frank. Role-Playing with Low Income People. Washington, D.C.: Tutorial Assistance Center.

Stresses the purposes, techniques, and results of role-playing, especially among low-income groups, with specific instructions for conducting role-playing sessions. An excellent short paper on role-play. A word of caution is offered: staff planning to use role-playing should be sure of their goals and capable of directing the situation and handling any conflict or stressful situation that may arise.

Harrison, Grant Von. Structured Tutoring. Provo: Division of Communication Services, Brigham Young University, 1971.

Through a series of experiments conducted over a four-year period Dr. Harrison's data substantiated several pertinent findings. In most instances tutoring per se does not benefit students. In sharp contrast, it has been demonstrated that if tutoring is approached in a highly structured way students can benefit a great deal from tutoring. New dimensions of instruction which go beyond programmed instruction are opened up by structured tutoring. These and the basic elements of the structured tutoring model are reviewed in this paper.

_____. Training Students to Tutor. T.M. 3685/000/00, Santa Monica: Systems Development Corporation, 1967.

This document describes research conducted as part of the study, "Evaluation and Revision of Classroom Procedures." Following an investigation of the instructional procedures that involved older children tutoring first graders it was determined that older children would need to be trained to effectively tutor younger children. This document describes the explanation of (1) what

behavioral skills are necessary to tutor with the planned instructional materials, (2) what are tutorial capabilities of upper grade elementary children, and (3) what procedures will be necessary to train older children to tutor with the available instructional materials. The procedures and steps taken in the development of the tutor training program are described.

Harrison, Grant Von, and Brimley, Vern. The Use of Structured Tutoring Techniques in Teaching Low Achieving Six Year Olds to Read. Paper presented at the American Educational Research Association Annual Meeting, New York City, N.Y., February, 1971.

The prime objective of this study was to investigate the feasibility of devising a highly individualized beginning reading program for low-achieving six-year-olds that would be financially feasible to replicate in any school district. The structured tutoring approach was used and empirical data compiled and reported.

Harrison, Brant Von, and Keele, Reba L. The Effect of Parents Using Structured Tutoring Techniques in Teaching Their Children to Read. Paper presented at the American Educational Research Association Annual Meeting, New York, N.Y., February, 1971.

A tutor manual using the established principles of learning and specific techniques for teaching the content material was designed for adult tutors. Two groups of tutors, parent and student tutors, were used for two groups of tutees, kindergarten and first grade. Experimental and control groups were set up.

Isgar, Hazel-Ann. Tutor Training. Washington, D.C.: Tutorial Assistance Center, 1966.

Presents six methods for tutor training. Brief but provides enough information for a project to plan and run a training program. It is the most complete short training paper available.

Isgar, Tom. Albuquerque Tutoring: Program of Many Aspects. Washington, D.C.: Tutorial Assistance Center.

Discusses two of the aspects of the Council, the development of community support and the tutoring of Indian students.

_____. Providence High School. Washington, D.C.: Tutorial Assistance Center, 1966.

An intra-school tutoring program: a successful tutoring situation that has failed in a number of other cases.

_____. The Governor's Committee on Literacy and Learning. Washington, D.C.: Tutorial Assistance Center.

The Governor's Committee on Literacy and Learning Study presents the formulation, function and facts about a state-wide organization. The GCLL is a model that can be implemented in other states.

Isgar, Tom. Tutorial and Cultural Relations Project. Washington, D.C.: Tutorial Assistance Center.

The Michigan case study describes one of the better tutorial projects in the nation. In addition to a basic description of the program the case study includes two ideas the staff of the Michigan Project have implemented and feel will be valuable to all.

_____, and Isgar, Susan. Conference Planning. Washington, D.C.: United States National Student Association, 1969.

This booklet contains articles that discuss several different conference models and point out pitfalls in conference planning. A lengthy check list is included that has been used at several conferences.

_____. Learning Games. Washington, D.C.: United States National Student Association.

With little exception, the time an American student spends in the classroom is irrelevant to the society in which he lives and the decisions it demands he make in order to live in it productively and happily. This booklet contains games that have been designed to teach students how to deal with real conflicts and problems that occur daily.

Kirsch, Beth. Tutor Orientation: A New In-depth Approach. Washington, D.C.: Tutorial Assistance Center, 1966.

This is an account of a tutor training program. It includes guide lines for the first orientation session, suggestions for discussion, and methods for continuing in-service tutor training.

Lippitt, Ronald, and Lippitt, Peggy. "Cross-Age Helpers." National Education Association Journal, LVII (March, 1968). 24-6.

This article describes a program for cross-age helpers that evolved from four years of study by a team of social scientists from the University of Michigan. Different ways of developing a program which would stimulate older students and at the same time train them to help meet younger students' individual remedial needs, enrich their learning opportunities and increase their motivation to learn were tested.

_____. Cross-Age Helping Program. Ann Arbor: University of Michigan, 1968.

Information was gathered during six years of research and use. A package of dissemination materials is now available to help those who are considering the possibility of starting a program of their own. This package contains a book to be used for orientation to the idea of Cross-Age Helping, in-service training for a staff team for the project, and training sessions for older children who will act as helpers.

Lobenstein, Margaret. For the Tutor. New York: National Commission on Resources for Youth, Inc., 1970.

Tutors and tutees contributed many ideas that they had found through experience to aid the tutoring situation. This booklet is slanted toward reading but with a little creativeness it will contribute much to other learning areas.

_____. Tutoring, Tricks, and Tips. New York: National Commission on Resources for Youth, Inc., 1970.

Problems likely to come up for the tutor as he works with the tutee are listed at the beginning of this booklet. Through a very nonconventional format these problems are viewed and discussed. (YTY)

Melaragno, Ralph J., and Newmark, Gerald. "A Tutorial Community Works Toward Specified Objectives in An Elementary School." Educational Horizons, XLVIII (Winter, 1969), 33-7.

A seven-year study is reported in this article whose ultimate objective is the development of a functioning, operational "tutorial community," involving an entire elementary school. This school is to serve as a prototype model where people can observe a totally innovative school in operation and gain experience in developing and operating a tutorial community.

Niedermeyer, Fred C. "Effects of Training on the Instructional Behaviors of Student Tutors." The Journal of Educational Research, LXIV (November, 1970), 119-23.

This study assessed the instructional behaviors of trained student tutors and compared these behaviors with those of untrained tutors. Two questions were investigated: (1) To what extent do tutors need to be trained? and (2) Do untrained tutors display the same instructional behaviors as those trained in specific skills?

_____, and Ellis, Patricia Ann. The Development of A Tutorial Program for Kindergarten Reading Instruction. Inglewood: Southwest Regional Laboratory, 1970.

The program was formulated from the rationale that when learning tasks require much practice nonprofessionals can be effective tutors monitoring practice responses and administering verbal praise. The objectives were written specifying what tutors should do when tutoring. This program includes the tutor training procedures.

Noce, James S. Research and Evaluation in Tutorial Programs. Washington, D.C.: Tutorial Assistance Center, 1967.

A Discussion of research and evaluation as regards its meaning, necessity, methodology, problem areas and goals in the tutorial movement.

North Carolina Advancement School Tutoring Staff. The Junior Tutoring Manual. Washington, D.C.: Tutorial Assistance Center.

Directed to individual tutors. Contains rules, hints and ideas for tutoring. Thorough enough to be used by project staff as a program guide. Its size (small) makes it desirable to distribute to tutors.

Organizing A Project: Beginning the Dialogue. Washington, D.C.: Tutorial Assistance Center.

Points out the relationship of a project in its various stages to the community. In addition to community relations, some space is devoted to establishing a project which will be community centered and which will require the participants to live and work in the community. A section about orientation, administration, training, etc. is included.

Pearson, David A. An Evaluation of the 1967-1968 Volunteer Reading Tutoring Program in the Central City Community of Milwaukee. Milwaukee: University of Wisconsin.

This paper evaluated the effectiveness of the Milwaukee Volunteer Reading Tutoring Program in (1) improving reading skills of the tutees and (2) changing the attitudes of the tutees toward reading and school. The conclusions and recommendations will be of interest to any person planning a similar reading program or interested in adding to empirical data resulting from such programs.

Philadelphia Tutorial Project. An Introduction to Tutoring. Washington, D.C.: Tutorial Assistance Center.

The most change-oriented listed. It raises many questions about the effectiveness of the present school system and presents the tutorial as a partial solution. Divided into sections: Background, Developing the Dialogue, Tutoring Process, New Methods, and Problems. Each section is comprehensive and thorough. One of the better manuals in print: valuable for staff as well as tutors.

Programmed Tutorial Reading Project Indianapolis, Indiana. Washington, D.C.: U.S. Government Printing Office.

This project was part of an independent study of selected exemplary programs for the education of disadvantaged children. The researchers reported the project significantly improved the educational attainment of the disadvantaged children involved. Other communities, in reviewing the educational needs of the disadvantaged youngsters they serve, may wish to use this project as a model--adapting it to their specific requirements and resources.

Project Administration: Sample Applications and Forms. Washington, D.C.: Tutorial Assistance Center.

A compilation of samples of filing and record systems from a variety of projects with brief descriptions of the projects.

Project Speed-up, Columbia, South Carolina, Famous Negroes. Washington, D.C.: Tutorial Assistance Center, 1966.

A series of reading passages, all biographies of distinguished yet relatively unknown American Negroes: statesmen, ministers, philosophers, soldiers, biologists, educators, and others.

Riddell, Janet. Study Hall Tutoring--A Success? Washington, D.C.: Tutorial Assistance Center, 1966.

An evaluation of an after-school study hall conducted by Pomona College students in a Claremont barrio. Primarily a case study but contains much information about study centers. Some information on tutoring Spanish Americans which should be regarded only as guidelines and suggestions.

Riessman, Frank. Tutoring the Disadvantaged Child. Washington, D.C.: Tutorial Assistance Center.

Dr. Riessman points out a number of sociological problems surrounding the disadvantaged child. He attempts to place tutoring in its proper place as an agent in the solution. The material is not technical but exposes tutors to some of the problems they must face. Especially helpful to staff in conducting training and to tutors facing the disadvantaged child for the first time.

Rosner, Herbert. Facets of A Cross-Grade Tutorial Program. Paper presented to IRA Convention, Anaheim, California, May 7, 1970.

Some necessary characteristics for a successful cross-grade tutorial reading program are identified in this paper. The primary grade teacher has a tremendous challenge as she seeks to adequately meet the individual reading needs of her students. The purpose of this program provides the teacher with an approach toward reaching a greater number of children at an early age through the use of other students. Program design including individual's roles, materials needed, and evaluation results are reported.

Rossi, Timothy P. "HELP: Students Teach Students." Reading Improvement, VI (Fall, 1969), 47-9.

This article discusses a reading teaching program with disadvantaged children in Jersey City, New Jersey. High school students acted as elementary reading teachers, on a one-to-one basis. The results were gratifying both for the pupils and for the teenage teachers.

Schoeller, Arthur W., ed. Problems, Pitfalls, and Prescriptions for Organizing Volunteer Reading Tutoring Programs. Milwaukee: University of Wisconsin, September, 1968. (Revised 1971).

The Volunteer Reading Tutoring Program is aimed at the greatest human dignity for all of mankind. It is an experiment in community leadership development. This is a guidebook written to describe a model program that other community groups anywhere can set up, so that the much needed individual help that central city pupils need can be given to as many as possible of the hundreds of thousands who need it.

Schoeller, Arthur W., and Pearson, David A. "Better Reading Through Volunteer Reading Tutors." The Reading Teacher, XXIII (April, 1970), 625-630+.

This report presents the findings of the 1967-68 Volunteer Reading Tutoring Program developed in Milwaukee, Wisconsin's central city, by community residents with the help of the University of Wisconsin, Milwaukee, Reading Clinic and the University of Wisconsin--Extension Center for Community Leadership Development, with the cooperation of Milwaukee Public Schools. The study centered on what results can volunteer reading tutors obtain in building reading skills and in improving attitudes toward reading and school?

_____. "Volunteer Reading Tutors Consistently Produce Better Reading." Milwaukee: University of Wisconsin.

This report presents the findings of the 1968-69 Volunteer Reading Tutoring Program developed in Milwaukee, Wisconsin's central city, by community residents with the help of the University of Wisconsin--Milwaukee Reading Clinic and the University of Wisconsin--Extension Center for Community Leadership Development with the cooperation of the Milwaukee Public Schools, proving once again that tutors can help pupils improve their reading achievement. This report shows continued improvement in reading achievement gained by pupils in a volunteer reading tutoring program.

Silberman, H.; Coulson, J.; Melaragno, R.; and Newmark, G. Use of Exploratory Research and Individual Tutoring Techniques for the Development of Programming Methods and Theory. Santa Monica: Systems Development Corporation, 1964.

Due to the lack of adequate exploratory research, important program variables for programmed instruction have not been identified and significant results have seldom been obtained in the formal experiments. The study reported here is intended to generate useful and testable hypotheses concerning significant variables in programmed instruction. Tutoring techniques with individual students were used to study and revise four self-instructional programs. Records were kept of students' difficulties and tutorial procedures that were beneficial. Tutorial operations that overcame common student problems were added to the program as revised.

Spindler, George D. Basic Concepts in Anthropology--The Cross-Cultural Experience. Washington, D.C.: Tutorial Assistance Center, 1966.

This short discussion is part of a paper prepared for Foreign Student Advisors and deals with the problems of foreign students which are similar in many ways to the problems experienced by children of Indian, Mexican and Negro background. Valuable for the orientation of prospective tutors.

Student Woodlawn Area Project. Prospectus--Student Woodlawn Area Project. Washington, D.C.: Tutorial Assistance Center, 1966.

Prospectus of an extensive, student-initiated tutorial in a Chicago community. Reports on the development of community involvement of parents and local teachers as well as students, supplementary programs, a financial statement, and a project evaluation.

Thelen, Herbert A. Learning by Teaching. Conference Report, Chicago: University of Chicago, December, 1969.

Second edition of a report of the Helping Relationship Conference organized and developed by Professor Thelen. The belief that education is living not just preparation for life caused some educators to explore the dynamics of the helping relationship structures. This rewritten report is an effort to help educators and parents gain a sense of the exciting possibilities of helping relationships and hopefully develop programs within our schools. A close look is provided of the roles of administrators, teachers, tutors and the learning situation.

_____. "Tutoring by Students." The School Review, LXXVII (September-December, 1969), 229-44.

The author briefly describes some tutoring activities in different school systems across the nation, and speculates on these school activities as responses to certain conditions in modern society. Finally he projects some further ideas about how the "helping relationship" might revitalize America's schools. He invites the reader to both visualize the various phenomena of "tutoring" and appreciate their germinal value for school reform.

Tutor Manual. Washington, D.C.: Tutorial Assistance Center, 1967

This booklet is for the tutor. It provides background information which will help relax and prepare the tutor for the sessions with the tutee. Sections of the manual are devoted to the culture of poverty.

University of California. How to Start A Tutorial Project. Los Angeles: University of California, 1964. (Available from Tutorial Assistance Center.)

A description of problems encountered in the establishment, operation and growth of the UCLA project. A general discussion which allows project staff to anticipate problems and plan to meet them when and if they arise.

University of Michigan. Tutorial and Cultural Relations Project: Tutor Handbook. Washington, D.C.: Tutorial Assistance Center.

Contains large sections on philosophy of tutoring, cultural differences and general advice to tutors. Some general discussion of methods and materials for tutoring. Separated into grades one to three, four to six and upper. In addition, there is a section with suggestions for games. This is a very complete manual; one that can be used anywhere by tutors and staff.

Weinstein, Gerald; Ungerleider, Charles; Preston, Frederick; Osborn, Chad; and Bannister, Langston. Youth Tutoring Youth: A Manual for Trainers. New York: National Commission on Resources for Youth, Inc., 1970.

This booklet is actually a "package" with detailed plans for the first few weeks of a tutor-training program. Through this program tutors and tutees are asked to develop a relationship and to develop new kinds of learning about who they are and how they

connect with the world around them. The basic philosophy underlying this program is: the more the tutor or tutee gets a positive definition of himself and the more competent he feels as a human being--the more open he will be to whatever instruction goes on in the regular school.

Wilson, Jeanne. Listening Skills Through Poetry. Washington, D.C.: Tutorial Assistance Center, 1966.
Explains a method to interest children in reading through poetry. Developed for classroom use but easily adapted for one-to-one use. Listening and reading aloud rather than silent reading are central to the approach.

Yoder, Rick. The Clearing House--University of Colorado. Washington, D.C.: Tutorial Assistance Center, 1966.
Principles of how to develop a multi-faceted volunteer community involvement program in one year.

You're the Tutor. New York: National Commission on Resources for Youth, Inc., 1970.
"How Should I Act?" "What Should I Do?" "How About Planning?" are discussed through many photographs and the necessary printed words. (YTY)

Youth Educational Services. Creative Approaches to Tutoring. Washington, D.C.: Tutorial Assistance Center, 1966.
Lists ways to stimulate interest and devise new materials. It should not be considered complete, but rather suggestions from which tutors can build. It can be used by all tutors.

Youth Tutoring Youth--Supervisor's Manual. New York: National Commission on Resources for Youth, Inc., 1968.
The goals supporting the purpose of this booklet are (1) better language skills--for both tutor and tutee, (2) more positive self-image--for both tutor and tutee, and (3) better ways to handle responsibility--for tutor especially. The responsibility of the supervisor from program organization through evaluation is presented step by step. Resources supporting each step are organized by services supplied.

Zach, Lillian; Horner, Vivian; and Kaufman, Judith. "Tutoring in a Slum School." The Elementary School Journal, LXX (October, 1969), 20-27.
This study investigated the problem of motivation in school learning. Two hypotheses were tested: (1) systematic reinforcement produces greater learning than non-systematic reinforcement, and (2) disadvantaged children, whatever the conditions of reinforcement, show increased achievement when the children receive regular individual tutoring in addition to classroom instruction.

SUPPLEMENT TO ANNOTATED BIBLIOGRAPHY

Harrison, Grant Von. An Introspection of a Student Tutoring Program. Provo, Utah: Division of Communication Services, Brigham Young University, 1971.

This paper is a transcript of a presentation made to all the elementary school principals in the Alpine School District in American Fork, Utah, school district officials, and representatives from the Office of Education for the State to acquaint them with the tutorial program implemented in five Title I elementary schools. The system utilized upper grade elementary students as tutors teaching primary grade children to read. The tutors were trained in the use of validated structured tutoring techniques commensurate with the selected instructional roles. The presentation was designed to: (1) provide some indication of how administrators, teachers, parents, and tutors were reacting to the program and, (2) acquaint other interested persons with the program.

_____. Effects of Professional and Non-Professional Trainers Using Prescribed Training Procedures. Provo, Utah: Division of Communication Services, Brigham Young University, 1971.

This paper reports the study to identify specific tutoring techniques that would enhance a student tutor's ability to teach a child a specified objective. Training materials were developed capable of training student tutors in the use of the specified tutoring techniques. Professional educators and non-professional trainers trained student tutors. A control group of student tutors received no training. Professionals and non-professional trainers trained tutors who averaged 80% on the tutor observation scales, the control group averaged 13% on the same scales.

_____, and Cohen, Arthur M. Empirical Validation of Tutor-Training Procedures. Paper presented at the California Education Association annual meeting, San Diego, California, April 29 through May 30, 1971.

This study was designed following the study of research which established that unless student tutors are trained to use specified tutoring techniques that facilitate learning, they do not generally use effective tutoring techniques. This study empirically identified training procedures and techniques appropriate for training upper-grade elementary student tutors. The four phases of the study include: (1) Identification and validation of relevant tutoring techniques, (2) Development of Tutor-Observation Scales, (3) Empirical formulation of tutor-training procedures, (4) Validation of the training procedures.

Janowitz, Gayle. After School Study Centers - Volunteer Work in Reading. Chicago: Commission on Human Relations, 1964.

This paper is based on the author's experiences at the Hyde Park Neighborhood Club Study Center. Hyde Park is an integrated community in the vicinity of the University of Chicago with a grass-roots organization studying and working on community problems. This study center opened in September, 1962 and in November, 1962, the individual tutoring program was added to the library and homework facilities of the Center. The author prepared this paper from the experiences of this group and uses the paper as orientation for new tutors in the program, many of whom do not have teaching experience.

Melaragno, Ralph J., and Newmark, Gerald. A Study to Develop a Tutorial Community in the Elementary School. Santa Monica: Systems Development Corporation, 1969.

A promising resource for helping to individualize instruction and for changing the learning climate in the classroom that has received attention recently is the student himself--the use of elementary school pupils to assist each other in learning. With proper training and support from adults, children are able to function effectively in the role of helpers and teachers of other children. For maximum impact and effect on education, the tutorial concept must be broadened and extended so that the total climate of learning is changed in such a way as to significantly affect all children, at all grade levels. The authors of this study propose to create a school in which students at every grade level interact with other students as learners and as tutors, one in which the traditional barriers and distinctions between teacher and learner are broken down (since every individual in the community is both teacher and learner). This study is designed to continue over a seven-year period.

_____. Tutorial Community Project: Report of the First Year May, 1968 - June, 1969. Santa Monica: Systems Development Corporation, 1969.

The Tutorial Community Project is an attempt to take full advantage of the educational potential promised by the use of student tutors and related innovations. It is an attempt to change an entire elementary school of 1800 students into a functioning "tutorial community," a prototype model of a new kind of school from which others may learn and gain experience that will help them introduce changes to their own schools. The initial plan was to develop these three areas gradually over a seven-year period starting with kindergarten and adding one grade at a time, year by year. But as a result of the first year's experience, described in this report, this plan has been revised. TCP activities are now being introduced to the entire spectrum of grades--K through 6. This change has not altered, however, the three basic lines of development: (1) tutoring and related learning activities, (2) encounters, or intensive group discussion at the feeling as well as thinking level, (3) community-school involvement activities. Only the manner in which they are implemented has been changed.

Melaragno, Ralph J., and Newmark, Gerald. Tutorial Community Project: Report of the Second Year July, 1969 - August, 1970. Santa Monica: Systems Development Corporation, 1970.

The original proposal for the Tutorial Community Project contained two general goals: (1) the establishment of a model, prototype, Tutorial Community School, (2) the development of procedures for implementing tutorial community concepts in other elementary schools. It was expected that Pacoima Elementary School would be the prototype model, and that additional schools would become involved in order to develop the subsequent dissemination and implementation procedures. This two-year report states in light of the past two years' experience at Pacoima and the fact that much has been learned and achieved which is readily exportable to other schools, it appears highly appropriate to expand the Project to one other school in the near future and begin developing implementation procedures. It also seems highly probable to those working with this study that the more complete tutorial community model will occur more rapidly in the next school.

Robertson, Douglas J. The Effects of an Intergrade Tutoring Experience on Tutor Self-Concept. Paper presented at the 49th Annual Conference of the California Educational Research Association, San Diego, April 30, 1971.

This study investigated the effects that an intergrade tutoring experience had on the self-concepts of fifth grade students who were trained to tutor first graders in the attainment of sight words. The results of the study indicated that experience as a tutor was a powerful independent variable. Fifth grade student tutors developed significantly different and more positive self-concepts as measured by the semantic differential. Subjects who were trained to tutor but were withheld from tutoring and the control subjects did not develop significantly different and more positive self-concepts.

_____. The Effects of an Intergrade Tutoring Experience on Tutor Attitudes Toward Reading and Teachers. Paper presented at the 49th Annual Conference of the California Educational Research Association, San Diego, April 30, 1971.

The purpose of this study was to assess the attitudes of fifth grade students who performed as tutors in an intergrade tutorial program toward the concepts: (1) READING and (2) TEACHERS. Fifth graders identified by their classroom teachers as low achievers in reading were trained to tutor first graders in sight word instruction. The results of the present study indicated that experience as a tutor was a powerful independent variable. Fifth grade student tutors developed significantly different and more positive attitudes toward the concepts: (1) Reading and (2) Teachers. Subjects who were trained to tutor but were withheld from tutoring and the control subjects did not develop significantly different and more positive attitudes toward the same concepts.